

Page 1

Line 7, change "in a fine processing of semiconductors" to
--in processing of fine semiconductors--

line 8, change "circuit" to --circuits--

line 11, change "circuit" to --circuits--

line 13, change "composition" to --compositions--

REMARKS

Claims 1-5 are pending in this application.

Issues under 35 U.S.C. § 103(a)

Claims 1-5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Tachikawa '255 (U.S.P. 4,356,255). This rejection is traversed for the following reasons.

Present Invention

The present invention is directed to a positive resist composition which includes a novolac resin, among other ingredients. The composition of the present invention provides for advantageously improved resolution, while maintaining satisfactory sensitivity properties in the production of semiconductor integrated circuits, as shown by the comparative test results in Table 1 at pages 14-15

of the specification, for example. The composition of the present invention may, for example, be disposed on a substrate, such as a silicon wafer, and used to make fine semiconductor integrated circuits as described at pages 9-10 of the specification, as well as in the Examples therein.

Distinctions between Present Invention and Tachikawa '255

Tachikawa '255 discloses a photosensitive member which includes a photosensitive layer containing an o-quinonediazide compound as a photosensitive agent and an additive selected from quinone and aromatic ketone compounds as described at column 2. The aromatic ketone compounds may include xanthone and thioxanthone as noted at column 3, lines 10-15. Tachikawa '255 discloses at column 3, lines 25-31 that,

Incorporation of resinous materials which are compatible with the above-cited essential ingredients and which are exemplified by styrene/maleic anhydride copolymer, styrene/acrylic acid copolymer, methyl methacrylate/methacrylic acid copolymer etc., can improve the mechanical strength of the resulting image or pattern.

Tachikawa '255 further describes at column 3, lines 34-44 various suitable supports for the disclosed composition.

Tachikawa '255 fails to disclose or suggest the use of a novolac resin as used in the composition of the present invention.

Note that the various "resinous materials" described at column 3, lines 25-31 of Tachikawa '255 fail to mention any type of novolac resin. Additionally, Tachikawa '255 fails to provide any basis for a motivation to one skilled in the art to employ a novolac resin as in the composition of the present invention, because Tachikawa '255 fails to mention or recognize any advantages associated with forming a composition including a novolac resin and other components in order to achieve advantageously enhanced resolution properties useful for forming semiconductor integrated circuits as evidenced by the comparative test results in Table 1 at pages 14-15 of the specification discussed above. In this regard, it is noted that the various suitable supports described in Tachikawa '255 at column 3, lines 34-44 fail to include a silicon wafer which is an example of a support useful in connection with the composition of the present invention. In any case, there fails to be any evidence of record which suggests to one skilled in the art to insert a novolac resin component into the composition of Tachikawa '255. Therefore, significant patentable distinctions exist between the present invention and Tachikawa '255.

In response to the comments stated in the Office Action, it is noted that the mere use of the general terms "positive" in the Tachikawa '255 document and in the application of the present invention fails to suggest to one skilled in the art to insert an

additional, undisclosed component (a novolac resin) into the composition of Tachikawa '255. The Tachikawa '255 document simply fails to establish a basic *prima facie* case of obviousness because a claimed element is absent from this document. In re Royka 180 USPQ 580 (CCPA 1974); MPEP 214.03, Rev. 1 Feb. 2000, page 2100-100.

It is submitted for the reasons stated above, that the present claims define patentable subject matter such that this application should be placed into condition for allowance.

If any questions remain regarding the above matters, please contact Applicant's representative, Andrew D. Meikle, in the Washington metropolitan area at the phone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By


Andrew D. Meikle, #32,868

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

ADM/mar
2185-0343P